

REMARKS

Claims 1-14, 60-88, and 108-111 are pending. Claims 60-69, 75, 77-86, and 88 are rejected under 35 U.S.C. § 102(e). Claims 70, 76, and 87 are rejected under 35 U.S.C. § 103(a). Claims 71-74, 76, and 87 are objected to. Claims 1-14 are allowed. Claims 60, 62, 78, 80, and 83 are currently amended in view of Examiner's explanation of Whinnett et al. (U.S. Pat. No. 6,317,411). New claims 108-111 are added.

In an Office Action dated October 11, 2005, Examiner explained that symbols S_1 and S_2 of Whinnett et al. each consist of 2 bits or digital signals. Examiner interprets the 2 bits of each symbol as a group of signals of claim 60. In view of this new interpretation of Whinnett et al., applicants have amended claim 60 to more clearly define the present invention. Referring to Figures 3 and 4 of the instant specification, for example, claim 60 and respective depending claims now recite "an input terminal coupled to receive a first (S_{1-4}) and a second group (S_{5-8}) of signals, each group having a respective sequence of different signals; a first output terminal coupled to receive the first group of signals during a first time; and a second output terminal coupled to receive a third group of signals ($-S_{8-5}^*$) having a sequence during the first time, **the third group of signals comprising a same transform of each signal of the second group of signals**, wherein the third group of signals is different from the second group of signals." (emphasis added). The present amendment, therefore, requires that the third group of signals comprises a same transform of each signal of the second group of signals. In the embodiment of Figure 4, the same transform is a negative conjugate. Applicants believe the present amendment distinguishes over Whinnett et al. Thus, applicants respectfully submit that claims 60-77 are patentable under U.S.C. § 102(e) over Whinnett et al.

Independent claim 78 is directed to a method of processing signals as shown in Figures 3-4 for plural encoder circuits. Applicants believe the present amendment more clearly defines the invention of claim 78 and distinguishes over Whinnett et al. Thus, applicants respectfully submit that claims 78-86 and 88 are patentable under U.S.C. § 102(e) over Whinnett et al.

New claims 108-111 are directed to a method of processing signals as shown in Figures 3-4. Claim 108 recites "receiving a first group of signals (S_{1-4}) at an encoder circuit; receiving a second group of signals (S_{5-8}) different from the first group of signals at the encoder circuit; producing the first group of signals at a first output terminal of the encoder circuit at a first time (t_{1-4}); and producing a transformed second group of signals at a second output terminal of the encoder circuit at the first time, each signal of the transformed second group of signals ($-S_{8-5}^*$) having a same transformation." (reference numerals added). Applicants believe these features are not disclosed by any of the cited references. Thus, claims 108-111 are patentable under U.S.C. § 102(e) or U.S.C. § 103(a).

In view of the foregoing, applicants respectfully request reconsideration of claims 60-88 and allowance of claims 60-88 and 108-111. If the Examiner finds any issue that is unresolved, please call applicants' attorney by dialing the telephone number printed below.

Respectfully submitted,



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